



Fee

PATENT
Attorney Docket No. RBN-001DV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Keene *et al.* GROUP NUMBER: 1636
SERIAL NUMBER: 10/629,453 CONFIRMATION NUMBER: 5725
FILING DATE: July 29, 2003 EXAMINER: Maria Marvich
TITLE: METHODS FOR ISOLATING AND CHARACTERIZING ENDOGENOUS
mRNA-PROTEIN (mRNP) COMPLEXES

CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. 1.8

I hereby certify that this correspondence, and any document(s) referred to below, is/are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 21st day of March, 2005.

Dated: March 21, 2005

Brenda T. Kowalczyk
Brenda T. Kowalczyk

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Submitted herewith is/are:

Transmittal (1 pg.); Revocation of Power of Attorney with New Power of Attorney and Change of Correspondence Address (2 pgs.); Copies of the Notice of Recordation of Assignment Documents from Jack D. Keene, Craig C. Carson and Scott A. Tenenbaum to Ribonomics, Inc. (17 pgs.); this Certificate of First Class Mailing and a return receipt postcard.

Transmittal

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22303-1450



(to be used for all correspondence after March 23, 2005)

Application Serial Number	10/629,453
Filing Date	July 29, 2003
First Named Inventor	Jack D. Keene
Group Art Unit	1636
Confirmation Number	5725
Examiner Name	Maria Marvich
Attorney Docket Number	RBN-001DV
Patent Number	Not Applicable
Issue Date	Not Applicable

Total Number of Pages in This Submission

21

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Check Attached <input type="checkbox"/> Copy of Fee Transmittal Form	<input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Amendment/Response <input type="checkbox"/> Preliminary <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declarations	<input type="checkbox"/> Status Inquiry <input checked="" type="checkbox"/> Return Receipt Postcard <input checked="" type="checkbox"/> Certificate of First Class Mailing under 37 CFR 1.8 <input type="checkbox"/> Certificate of Facsimile Transmission under 37 CFR 1.8 <input type="checkbox"/> Certificate of Hand Delivery <input checked="" type="checkbox"/> Revocation of Power of Attorney, Change of Correspondence Address <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below) 1. Copies of the Notice of Recordation of Assignment Documents from Jack D. Keene, Craig C. Carson and Scott A. Tenenbaum to Ribonomics, Inc.
<input type="checkbox"/> Response to Notice to File Missing Parts <input type="checkbox"/> Copy of Notice to File Missing Parts	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Executed Declaration and Power of Attorney for Utility or Design Patent Application	<input type="checkbox"/> Transmittal of Formal Drawing(s) <input type="checkbox"/> Total Sheets of Drawings __	
<input type="checkbox"/> Sequence Listing submission <input type="checkbox"/> Paper Copy/CD <input type="checkbox"/> Computer Readable Copy <input type="checkbox"/> Statement verifying identity of above	<input type="checkbox"/> Request for Continued Examination (RCE) Transmittal <input type="checkbox"/> Notice of Appeal to Board of Patent Appeals and Interferences <input type="checkbox"/> Appeal Brief (in triplicate)	
<input type="checkbox"/> CD(s) for large table or computer program	<input type="checkbox"/> Amendment After Allowance <input type="checkbox"/> Request for Certificate of Correction <input type="checkbox"/> Certificate of Correction (in duplicate)	
<input type="checkbox"/> Petition for Extension of Time		
<input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Form PTO-1449 <input type="checkbox"/> Copies of IDS Citations		

CORRESPONDENCE ADDRESS

Direct all correspondence to: Docketing Assistant
Sullivan & Worcester LLP
One Post Office Square
Boston, MA 02109
Tel. No.: (617) 338-2800
Fax No.: (617) 338-2880

SIGNATURE BLOCK

Respectfully submitted,

Date: March 21, 2005
Reg. No.: 43,153
Tel. No.: (617) 338-2952
Fax No.: (617) 338-2800
Diana M. Steel, D. Phil.
Attorney for Applicants
Sullivan & Worcester LLP
One Post Office Square
Boston, MA 02109



REVOCATION OF POWER OF ATTORNEY WITH NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS	Application Number	10/629,453
	Filing Date	July 29, 2003
	First Named Inventor	Jack D. Keene
	Art Unit	1645
	Examiner Name	Not yet assigned
	Attorney Docket Number	RBN-001DV

I hereby revoke all previous powers of attorney given in the above-identified application.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint the practitioners associated with the Customer Number: **44966**

☐ Please change the correspondence address for the above-identified application to:

☒ The address associated with Customer Number: **44966**

OR

☒ Firm or
Individual Name

**Docketing Assistant
Sullivan & Worcester LLP**

Address

One Post Office Square

Address

City

Boston

State

MA

Zip

02109

Country

USA

Telephone

(617) 338-2800

Fax

(617) 338-2880

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Name

Christopher B. Kelly

Title: **President**

Signature

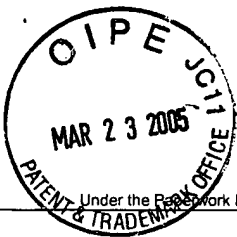
Date

Telephone

(919) 544-1023 Ext. 2117

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*

☐ * Total of _____ forms are submitted.

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: **Jack D. Keene, Scott A. Tenenbaum and Craig C. Carson**Application No./Patent No.: **10/629,453** Filing/Issue Date: **7-29-03**Title of Application: **Methods For Isolating and Characterizing Endogenous mRNA-Protein (mRNP) Complexes****Ribonomics, Inc., a Corporation**

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ % in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel **014848**, Frame **0427**, Reel **014866**, Frame **0421**, and Reel **014866**, Frame **0405**, or for which a copies thereof are attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A true copy of the original assignment must be submitted to the Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date

(919) 544-1023 Ext. 2117

Telephone number

Christopher B. Kelly

Typed or printed name

Signature

President

Title



RECEIVED

JUL 11



KDN-0010

UNITED STATES PATENT AND TRADEMARK OFFICE

TESTA, HURWITZ & THIBEAULT, LLP
PATENT ADMINISTRATOR
SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JULY 14, 2004

PTAS

TESTA, HURWITZ & THIBEAULT, LLP
PATENT ADMINISTRATOR
HIGH STREET TOWER
125 HIGH STREET
BOSTON, MA 02110



102639927A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/02/2004

REEL/FRAME: 014848/0427

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KEENE, JACK D.

DOC DATE: 12/23/2002

ASSIGNEE:

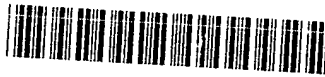
RIBONOMICS, INC.
P.O. BOX 13169
RESEARCH TRIANGLE PARK
NORTH
CAROLINA
27709

DOROTHY WILLIAMS, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RBN-001DV

PATENT

01-07-2004

102639927
PATENT 327

EET

OFFICE OF PUBLIC RECORDS

2004 JAN -2 AM 9:52

REC

FINANCE

TO: Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

- ☒ New
- ☐ Resubmission (Non-Recordation)

Document ID#:

- ☐ Correction of PTO Error

Reel #: Frame #:

- ☐ Corrective Document

Reel #: Frame #:

Conveyance Type

- ☒ Assignment ☐ Security Agreement
- ☐ License ☐ Change of Name
- ☐ Merger ☐ Other

U.S. Government

(For use ONLY by U.S. Government Agencies)

- ☐ Departmental File ☐ Secret File

Conveying Party(ies)

- ☐ Mark if additional names of conveying parties attached

Name Jack D. KeeneExecution Date
Month Day Year

12/23/02

Name Name Name Name Name

Receiving Party

- ☐ Mark if additional names of receiving parties attached

Name (line 1) Ribonomics, Inc.Name (line 2) Address (line 1) P.O. Box 13169Address (line 2) Address (line 3) Research
Triangle Park

NC

27709

City

State/Country

Zip Code

- ☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name Address (line 1) Address (line 2) Address (line 3) Address (line 4)

FOR OFFICE USE ONLY

01/06/2004 DBYRNE 00000066 10629453

01 FC:8021

40.00 DP

2731006

Mail documents to be recorded with required cover sheet(s) information to:
Box Assignment, Director of the United States Patent and Trademark Office, Washington, D.C. 20231

Correspondent Name and Address

Area Code and Telephone Number (617) 248-7000

Name Patent Administrator

Address (line 1) Testa, Hurwitz & Thibault, LLP

Address (line 2) High Street Tower

Address (line 3) 125 High Street

Address (line 4) Boston, MA 02110

Pages Enter the total number of pages of the attached conveyance document including any attachments.

2

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/629,453

Patent Cooperation Treaty (PCT)

Enter PCT application number
only if a U.S. Application Number
has not been assigned.PCT PCT PCT
PCT PCT PCT

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41):

\$ 40.00

Method of Payment:

Enclosed ☒Deposit Account ☐

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account)

Deposit Account Number

20-0531

Authorization to charge additional fees:

Yes ☒ No ☐

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Diana M. Steel, Reg. No. 43,153

Name of Person Signing



Signature

12/30/03

Date

ASSIGNMENT

WHEREAS, I, Jack D. Keene, Ph.D. ("Assignor"), have invented one or more inventions described in the following applications (or provisional application):

1. Methods, Compositions and Kits for Structurally and Functionally Partitioning, Identifying and Characterizing Messenger RNA Subsets, Serial No. 60/173,338, filed in the United States Patent and Trademark Office on December 28, 1999;
2. Methods for Isolating and Characterizing Endogenous mRNA-Protein (mRNP) Complexes, Serial No. PCT/US00/35583, filed December 28, 2000; and
3. Methods for Isolating and Characterizing Endogenous mRNA-Protein (mRNP) Complexes, Serial No. 09/750,401, filed in the United States Patent and Trademark Office on December 28, 2000.

WHEREAS, Ribonomics, Inc. ("Assignee"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at P.O. Box 13169, Research Triangle Park, NC 27709-3169, desires to acquire an interest therein, in accordance with agreements duly entered into with me;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and for Six million-four-hundred-seventy-thousand-five-hundred-ninety-one (6,470,591) shares of Assignee's common stock, par value \$0.001 per share, the receipt of which is hereby acknowledged, I, do hereby sell, assign and transfer unto said Assignee, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said Assignee for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in Assignee to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of Assignee's selection and the right to procure the grant of all Letters Patent to Assignee in its own name as assignee of my entire right, title and interest therein;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said Assignee, its successors, assigns, and legal

representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications;

AND, I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, I hereby authorize Assignee or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of my execution of this assignment;

AND, I do hereby authorize and request the Director of the United States Patent and Trademark Office to issue such Letters Patent as shall be granted upon said application, or applications based thereon, to said Assignee, its successors, assigns, or legal representatives.

AND, this Assignment revokes and supersedes any previous assignments, whether written or oral, including but not limited to the assignment agreement dated October 19, 2000, between the parties with respect to the subject matter hereof and fully sets forth the entire agreement between the parties.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor:

Jack D. Keene
Jack D. Keene, Ph.D.

State/Commonwealth of NH
County of Durham) ss

Subscribed and sworn to before me, by the above-named Jack D. Keene, Ph.D. this 23rd day of

December, 2002.

Bhett D. Brotherton
Notary Public
My Commission Expires: 9/29/03



RBN-001A

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JULY 19, 2004

TESTA, HURWITZ & THIBEAULT, LLP
DIANA M. STEEL
HIGH STREET TOWER
125 HIGH STREET
BOSTON, MA 02110

RECEIVED



102639928A

JUL 27 2004

TESTA, HURWITZ & THIBEAULT, LLP

PATENT DEPARTMENT
UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/02/2004

REEL/FRAME: 014866/0421

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: RBN-001DV

ASSIGNOR:

CARSON, CRAIG C.

DOC DATE: 11/21/2002

ASSIGNEE:

RIBONOMICS, INC.
P.O. BOX 13169
RESEARCH TRIANGLE PARK
NORTH
CAROLINA
27709

SERIAL NUMBER: 10629453

FILING DATE: 07/29/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: METHODS FOR ISOLATING AND CHARACTERIZING ENDOGENOUS MRNA-PROTEIN
(MRNP) COMPLEXES

014866/0421 PAGE 2

ANTIONE ROYALL, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RBN-001DV

PATENT

01-07-2004

OFFICE OF PUBLIC RECORDS

R



2004 JAN -2 AM 9:53

102639928

SHEET

TO: Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

- ☒ New
- ☐ Resubmission (Non-Recordation)

Document ID#:

- ☐ Correction of PTO Error

Reel #: Frame #:

- ☐ Corrective Document

Reel #: Frame #:

Conveyance Type

- ☒ Assignment ☐ Security Agreement
- ☐ License ☐ Change of Name
- ☐ Merger ☐ Other

U.S. Government

(For use ONLY by U.S. Government Agencies)

- ☐ Departmental File ☐ Secret File

Conveying Party(ies)

- ☐ Mark if additional names of conveying parties attached

Name Craig C. CarsonExecution Date
Month Day Year

11/21/02

Name Name Name Name

Receiving Party

- ☐ Mark if additional names of receiving parties attached

Name (line 1) Ribonomics, Inc.Name (line 2) Address (line 1) P.O. Box 13169Address (line 2) Address (line 3) Research
Triangle Park

NC

State/Country

27709

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name Address (line 1) Address (line 2) Address (line 3) Address (line 4)

FOR OFFICE USE ONLY

01/06/2004 DBYRNE 00000065 10629453

01 FC:0021

40.00 00

2731073

Mail documents to be recorded with required cover sheet(s) information to:
Box Assignment, Director of the United States Patent and Trademark Office, Washington, D.C. 20231

Correspondent Name and Address

Area Code and Telephone Number (617) 248-7000

Name Patent Administrator

Address (line 1) Testa, Hurwitz & Thibault, LLP

Address (line 2) High Street Tower

Address (line 3) 125 High Street

Address (line 4) Boston, MA 02110

Pages Enter the total number of pages of the attached conveyance document including any attachments.

2

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/629,453

Patent Cooperation Treaty (PCT)

Enter PCT application number
only if a U.S. Application Number
has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41):

\$ 40.00

Method of Payment:

Enclosed ☒Deposit Account ☐

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account)

Deposit Account Number

20-0531

Authorization to charge additional fees:

Yes ☒No ☐

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Diana M. Steel, Reg. No. 43,153

Name of Person Signing



Signature

12/30/05

Date

ASSIGNMENT

WHEREAS, I, Craig C. Carson have invented one or more inventions described in an application for Letters Patent of the United States entitled:

Methods for Isolating and Characterizing
mRNA-Protein (mRNP) Complexes

and identified by

Serial No. 09/750,401 filed in the United States Patent Office on December 28, 2000; and

WHEREAS, Ribonomics, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at P.O. Box 13169, Research Triangle Park, NC 27709, desires to acquire an interest therein;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of eighty thousand (80,000) shares of ASSIGNEE'S Common Stock (which were issued on August 13, 2001, and with respect to which all repurchase rights of Assignee will vest on the date hereof) and twenty-five thousand dollars (\$25,000.00) to be paid to me by Assignee in five (5) equal installments, the first payable within ten (10) days of execution of this Agreement, the second payable within ten (10) days of January 1, 2003, the third payable within ten (10) days of February 1, 2003, the fourth payable within ten (10) days of March 1, 2003, and the fifth payable within ten (10) days of April 1, 2003, and of other good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional,

substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications;

AND, I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, I hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of my execution of this assignment;

AND, I do hereby authorize and request the Director of the United States Patent and Trademark Office to issue such Letters Patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor:

Craig C. Carson
Craig C. Carson

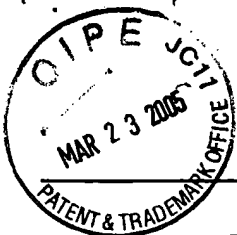
State/Commonwealth of)
County of) ss

Subscribed and sworn to before me, by the above-named Craig C. Carson this 21st day of November, 2002.

Richard B. Smith
Notary Public

My Commission Expires:

9/29/03



RECEIVED



JUL 27 2004

UNITED STATES PATENT AND TRADEMARK OFFICE

TESTA, HURWITZ & THIBEAULT, LLP
PATENT DEPARTMENT
UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JULY 19, 2004

PTAS

TESTS, HURWITZ & THIBEAULT, LLP
DIANA M. STEEL - PATENT ADMINISTRATOR
HIGH STREET TOWER
125 HIGH STREET
BOSTON, MA 02110



102639929A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/02/2004

REEL/FRAME: 014866/0405
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

TENENBAUM, SCOTT A.

DOC DATE: 11/21/2002

ASSIGNEE:

RIBONOMICS, INC.
P.O. BOX 13169
RESEARCH TRIANGLE PARK
NORTH
CAROLINA
27709

SERIAL NUMBER: 10629453

FILING DATE: 07/29/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: METHODS FOR ISOLATING AND CHARACTERIZING ENDOGENOUS MRNA-PROTEIN (MRNP) COMPLEXES

014866/0405 PAGE 2

LENELL MACKALL, SUPERVISOR
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

OFFICE OF PUBLIC RECORDS

01-07-2004

RBN-001DV

PATENT

2004 JAN -2 AM 9:53

RECC



:ET

FINANCE SECTION

102639929
PATENTS ONLY

TO: Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type



New



Resubmission (Non-Recordation)

Document ID#: 

Correction of PTO Error

Reel #: Frame #: 

Corrective Document

Reel #: Frame #:

Conveyance Type



Assignment



Security Agreement



License



Change of Name



Merger

Other

U.S. Government

(For use ONLY by U.S. Government Agencies)



Departmental File



Secret File

Conveying Party(ies)



Mark if additional names of conveying parties attached

Name Scott A. TenenbaumExecution Date
Month Day Year

11/21/02

Name Name Name Name Name

Receiving Party



Mark if additional names of receiving parties attached

Name (line 1) Ribonomics, Inc.Name (line 2) Address (line 1) P.O. Box 13169Address (line 2) Address (line 3) Research
Triangle Park NC 27709

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name Address (line 1) Address (line 2) Address (line 3) Address (line 4)

FOR OFFICE USE ONLY

01/06/2004 DBYRNE 00000064 10629453

01 FC:8021

40.00 00

2731074

Mail documents to be recorded with required cover sheet(s) information to:
Box Assignment, Director of the United States Patent and Trademark Office, Washington, D.C. 20231

Correspondent Name and Address

Area Code and Telephone Number (617) 248-7000

Name Patent Administrator

Address (line 1) Testa, Hurwitz & Thibault, LLP

Address (line 2) High Street Tower

Address (line 3) 125 High Street

Address (line 4) Boston, MA 02110

Pages Enter the total number of pages of the attached conveyance document including any attachments.

2

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/629,453						

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT		PCT		PCT	
PCT		PCT		PCT	

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41):

\$ 40.00

Method of Payment:

Enclosed ☒

Deposit Account ☐

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account)

Deposit Account Number

20-0531

Authorization to charge additional fees:

Yes ☒ No ☐

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Diana M. Steel, Reg. No. 43,153

Name of Person Signing

Signature

12/30/03
Date

ASSIGNMENT

WHEREAS, I, Scott A. Tenenbaum have invented one or more inventions described in an application for Letters Patent of the United States entitled:

Methods for Isolating and Characterizing
mRNA-Protein (mRNP) Complexes

and identified by

Serial No. 09/750,401 filed in the United States Patent Office on December 28, 2000; and

WHEREAS, Ribonomics, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at P.O. Box 13169, Research Triangle Park, NC 27709, desires to acquire an interest therein;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of eighty thousand (80,000) shares of ASSIGNEE'S Common Stock (which were issued on August 13, 2001, and with respect to which all repurchase rights of Assignee will vest on the date hereof) and twenty-five thousand dollars (\$25,000.00) to be paid to me by Assignee in five (5) equal installments, the first payable within ten (10) days of execution of this Agreement, the second payable within ten (10) days of January 1, 2003, the third payable within ten (10) days of February 1, 2003, the fourth payable within ten (10) days of March 1, 2003, and the fifth payable within ten (10) days of April 1, 2003, and of other good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional,

substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications;

AND, I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, I hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of my execution of this assignment;

AND, I do hereby authorize and request the Director of the United States Patent and Trademark Office to issue such Letters Patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor:


Scott A. Tenenbaum

State/Commonwealth of)
County of) ss

Subscribed and sworn to before me, by the above-named Scott A. Tenenbaum this 21st day of November 2002.


Notary Public

My Commission Expires: 9/29/03